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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,941	07/21/2003	Michael Xie	3000683-7035332001	7695

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EXAMINER	
BLUDAU, BRANDON S	

ART UNIT	PAPER NUMBER
2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/624,941	XIE, MICHAEL	
	Examiner	Art Unit	
	Brandon S. Bludau	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 27-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22 and 27-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in reply to amendment filed 22 February 2007. Claims 1,3,9,10,11,14,19,21 and 22 have been amended. Claims 23 –26 have been cancelled and claims 32-42 are newly added. Therefore claims 1-22 and 27-42 remain pending.

2. The Examiner acknowledges and accepts the amendment to claim 3 and necessarily withdraws the previous 112 rejection.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 19 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments with respect to claim 27 have been fully considered but they are not persuasive. The applicant argues that Radatti does not disclose both flagging the network traffic content and sending a copy of the network traffic content to a second processor. The Examiner maintains the rejection, noting that the claim language reads on flagging all network traffic content, thus the intercept module in Radatti effectively flags the traffic content by sending the traffic to the first protocol scanner, wherein upon a decision of a desired protocol, the scanner sends a copy of the traffic to a second processor (the proscribed code scanner) for determining whether the network traffic content contains content desired to be detected.

Claim Rejections - 35 USC § 103

5. Claims 1-22, 27-42 are rejected under 35 U.S.C. 103(a) as being anticipated by Radatti et al. (US PgPub 2001/0042214) and further in view of Suuronen et al. (US PgPub 20030145228).

6. As per claim 1, Radatti discloses a device for managing network traffic flow, the device comprising: a processor, the processor configured to

receive network traffic content,

determine whether a protocol of the network traffic content matches a prescribed protocol of network traffic content that could contain content desired to be detected (paragraph [0016] and [0035]), and

store the network traffic content in a stack when the protocol of the network traffic content matches the prescribed protocol (paragraph [0037] wherein it is necessary for the protocol scanner to store the traffic content in a stack while it is being processed/analyzed), wherein the stack is associated with a module configured to determine whether the network traffic content contains content desired to be detected ([0035] wherein the module is the proscribed code scanner), and

send at least a portion of the network traffic content to a memory when the protocol of the network traffic content matches the prescribed protocol (see [0037] wherein it may be argued that the memory is inherently included in the proscribed code scanner such as a buffer, enabling it to scan the code segments and calculate hashes of the code, as should be evident to one of ordinary skill in the art.)

The Examiner further includes Suuronen to demonstrate the necessary memory for storing at least a portion of the network traffic content at the code scanner for enabling the scanning of the traffic (see [0022]). In view of Suuronen the Examiner argues that it is necessary and obvious for one to include such a temporary storage in Radatti for storing the data stream to be scanned.

7. As per claim 2, Radatti discloses the device of claim 1, wherein the processor comprises a general purpose processor (see paragraph [0024]).

8. As per claim 3, Radatti discloses the device of claim 1, but does not disclose wherein the special purpose processor comprises an ASIC processor.

The Examiner notes that is common and well known in the art to use ASIC processors for performing a specific function.

It would have been obvious to one of ordinary skill in the art to perform the function of Radatti using an ASIC processor since they are well known and very commonly used. Motivation for one of ordinary skill in the art to use an ASIC processor would be to implement a processor that performs a specific function such as is desired in Radatti as would be well known to one of ordinary skill in the art.

9. As per claim 4, Radatti discloses the device of claim 3, wherein the ASIC processor is a semi-custom ASIC processor.

The Examiner notes that it is obvious in view of the above rejection to implement the processor wherein it is a semi-custom processor.

10. As per claim 5, Radatti discloses the device of claim 3, wherein the ASIC processor is a programmable ASIC processor (see rejection above).

11. As per claim 6, Radatti discloses the device of claim 1, wherein the processor is further configured to send the network traffic content to a user when the protocol of the network traffic content does not match the prescribed protocol (paragraph [0017[).

12. As per claim 7, Radatti discloses the device of claim 1, further comprising the stack ([paragraph [0035] wherein it is necessary that the processor comprise the stack

for storing the code while it is being processed; see also Suuronen as discussed in the rejection to claim 1).

13. As per claim 8, Radatti discloses the device of claim 7, wherein the stack is implemented in the processor or in another processor (paragraph [0035] see rejection above).

14. As per claim 9, Radatti discloses the device of claim 8, wherein the stack is configured to store network traffic content in accordance with the protocol of the network traffic content (paragraph [0035] wherein the network traffic is stored and processed as it is received from the communications stream and then returned to the original stream in accordance with the proscribed protocol thus necessitating that it is stored in accordance with the protocol).

15. As per claim 10, Radatti discloses the device of claim 1, wherein the processor is further configured to assemble the at least a portion of the network traffic content with the rest of the network traffic content, and transmit the network traffic content to a user when it is determined that the network traffic content does not contain the content desired to be detected (paragraph [0037]).

16. As per claim 11, Radatti discloses the device of claim 1, further comprising the module (paragraph [0037]).

17. As per claim 12, Radatti discloses the device of claim 11, wherein the module is implemented in the processor (paragraph [0037]).

18. As per claim 13, Radatti discloses the device of claim 11, wherein the module is implemented in an ASIC processor (see the rejection to claim 3).

19. As per claim 14, Radatti discloses the device of claim 1, wherein the processor is further configured to

flag the network traffic content when the protocol of the network traffic content matches the prescribed protocol, and

send the flagged network traffic content to the memory (paragraph [0037] see also the rejection to claim 10, wherein the determination of protocol scanner to transmit the code to the proscribed code scanner is effectively flagging the data).

20. As per claim 15, Radatti discloses the device of claim 14, further comprising the module (see claim 11).

21. As per claim 16, Radatti discloses the device of claim 15, wherein the module is implemented in the processor (see claim 12).

22. As per claim 17, Radatti discloses the device of claim 15, wherein the module is implemented in an ASIC processor (see claim 13).

23. As per claim 18, Radatti discloses the device of claim 1, wherein the content desired to be detected is selected from the group consisting of a virus, a worm, a web content, a Trojan agent, an email spam, and a packet transmitted by a hacker (paragraph [0004]).

24. Claim 19 is rejected because it discloses similar subject matter as claim 1.

25. Claim 20 is rejected because it discloses similar subject matter as claim 9.

26. Claim 21 is rejected because it discloses similar subject matter to claim 10.

27. Claim 22 is rejected because it discloses similar subject matter to claim 14.

28. As per claim 27, Radatti discloses a device for managing network traffic flow, the device comprising: a first processor, the first processor configured to

receive network traffic content,

flag the network traffic content,

send the flagged network traffic content to a module, the module configured to pass unflagged data to a user and prevent flagged data from being sent to the user, and send a copy of the network traffic content to a second processor, the second processor configured to determine whether the network traffic content contains content desired to be detected (see rejection to claim 14 and 23 wherein the data is effectively flagged as it is transmitted to the proscribed code scanner and the unflagged data is passed back to the communications stream, see also arguments above). The Examiner further discusses Suuronen to demonstrate the lack of novelty of the Applicants invention. Suuronen discusses a firewall containing a processor for "flagging" data, and then further passing the flagged data to a second processor for determining whether the flagged data contains a virus (see [0020]-[0022]). Suuronen is not used to correct any deficiencies in Radatti, but to further demonstrate the commonality of the Applicant's invention as found in the art.

29. As per claim 28, Radatti discloses the device of claim 27, wherein the first processor is further configured to transmit the network traffic content to a user when it is determined that the network traffic content does not contain the content desired to be detected (paragraph [0033]).

30. As per claim 29, Radatti discloses the device of claim 27, wherein the module comprises a memory, a buffer, or at least a portion of a processor (paragraph [0033]).

31. Claim 30 is rejected because it discloses similar subject matter to claim 27.

32. Claim 31 is rejected because it discloses similar subject matter to claim 28.

33. As per claim 32, Radatti discloses the device of claim 1, further comprising the memory (see [0037] and further [0022] of Suuronen).

34. As per claim 33, Radatti discloses the device of claim 27, wherein the first processor is configured to pass a portion of the network content downstream before the second processor finishes processing the network traffic content (see [0036] wherein the code that is not scanned is sent downstream).

35. As per claim 34, Radatti discloses the device of claim 27, wherein the first processor and the second processor are parts of a processor (see [0045] wherein it is discussed that the modules may be on the same machine, as thus may necessarily be parts of a processor).

36. As per claim 35, Radatti discloses the device of claim 34, wherein the processor comprises an ASIC processor (see rejection to claim 3).

37. As per claim 36, Radatti discloses the device of claim 27, wherein the first processor is configured to flag the network traffic content by modifying data associated with the network traffic content or by inserting data to the network traffic content. The Examiner takes official notice that it is well known in the art that flagging data may consist of inserting or modifying data to be flagged. While Radatti doesn't specifically discuss flagging the data, Radatti does differentiate desired data to be scanned from

data that may not contain a virus, and thus it would have been obvious for one of ordinary skill in the art to modify Radatti to include in the differentiation step, a step of flagging the data to be scanned. This technique is well known in the art and would have been an obvious modification in view of the functionality of Radatti.

38. As per claim 37, Radatti discloses the method of claim 30, wherein a portion of the network traffic content is passed downstream before the processor finishes processing the network traffic content (see rejection to claim 33).

39. As per claim 38, Radatti discloses the method of claim 30, wherein the processor comprises an ASIC processor (see rejection to claim 3).

40. As per claim 39, Radatti discloses the method of claim 30, wherein the network traffic content is flagged by modifying data associated with the network traffic content or by inserting data to the network traffic content. (see rejection to claim 36).

41. As per claim 40, Radatti discloses a device for managing network traffic flow, the device comprising: a processor, the processor configured to receive network traffic content, pass a first portion of the network traffic content downstream, and pass a second portion of the network traffic content to a stack for allowing the second portion to be scanned for content that is desired to be detected ([0037]).

42. As per claim 41, Radatti discloses the device of claim 40, wherein the processor is further configured to pass the second portion downstream after the second portion is scanned ([0037] wherein if it is determined that the second portion doesn't contain malicious content, then it is passed downstream).

43. As per claim 42, Radatti discloses the device of claim 40, wherein the first portion of the network traffic content is not scanned for the content that is desired to be detected (see [0037] wherein the data not meeting a specified protocol is not scanned and is passed to the user).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Joyce (US Patent 6519703) and Patel (US Patent 7181765).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Bludau whose telephone number is 571-272-3722. The examiner can normally be reached on Monday -Friday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BB
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